

## ABSTRACT

5 A fuel cell power system practical for use in a vehicle includes a fuel cell, a  
first hydrogen storage vessel having a first hydrogen absorbing material storing and  
releasing hydrogen, a catalytic combustor that heats the first hydrogen storage  
vessel so as to release hydrogen in order to supply hydrogen to the fuel cell, and a  
second hydrogen storage vessel having a second hydrogen absorbing material  
10 storing and releasing hydrogen and has a hydrogen release temperature that is  
lower than that of the first hydrogen absorbing material, the second hydrogen  
storage vessel releasing hydrogen as a fuel for the catalytic combustor under  
heating by waste heat from the fuel cell. Since the catalytic combustor can generate  
high temperature heat, a hydrogen absorbing material having a high hydrogen  
release temperature and a high hydrogen storage capacity per unit weight can be  
15 used as the first hydrogen absorbing material.